

Serial No. 09/599,174
ACC0786PIUS

39. (New) A process according to claim 10, wherein the proportion of siloxane repeating units in the film-forming polymer (A) is not more than 10%.

40. (New) A process according to claim 10, wherein the proportion of siloxane repeating units in the film-forming polymer (A) is not more than 5%.

Response

The present response amends claims 4, 5 and 10, cancels claims 30 and 34 without prejudice and requests reconsideration of the rejected claims. A Marked Version of the amendments is attached.

Claims 4, 5, 10 and 30 are rejected under 35 U.S.C. 112, second paragraph. Claims 4, 5 and 10 are amended herein to delete the "preferably" and/or "more especially" and/or "especially" and/or "for example" claim language and their accompanying narrower range limitations. As such, claims 4, 5 and 10 are now broader in scope without the narrower range limitations. The narrower range limitations are now contained in the newly added dependent claims.

Claims 30 and 34 are rejected under 35 U.S.C. § 102 (b) as allegedly being anticipated by WO 93/13179. These claims are cancelled herein without prejudice. Accordingly, withdrawal of the rejection is requested.

Claims 1-29 and 31-33 are rejected under 35 U.S.C. § 103 (a) as allegedly being obvious based on WO 93/13179. This rejection is respectfully traversed.

In the process of the invention two coating layers are applied to a substrate. In Claim 1 a process is claimed in which the first coating layer comprises a film-forming polymer (A) carrying unreacted curable silicon-

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containing functional groups providing latent reactivity. A discussion of latent reactivity can be found, for example, on page 11, lines 24-35, of the specification. For example, to provide latent reactivity, the initial coating formulation would not include any cross-linking agent, curing catalyst, or any other material which may detract unduly from the desired latency. In the initial coating only a minimum of self-curing should take place.

In contrast to the claimed invention, the coating composition according to WO 93/13179 comprises a polymer carrying curable silicon-containing functional groups and a fouling inhibiting material (B). In WO 93/13179 at page 3, lines 15-26, it is stated that the curable functional groups in component (A) are capable of undergoing a condensation curing reaction with component (B). Further, at page 5, lines 10-20, it is stated that the condensation cure between components (A) and (B) may optionally involve a cross-linking agent. In other words, a cross-linking agent is not obligatory for the curing reaction to take place. Thus, when applying a layer of a coating composition according to WO 93/13179, curing will inevitably take place. In the applied layer, A will immediately react with B which results in a layer without latent reactivity.

Thus, when applying "wet-on-wet" two layers of a coating composition according to WO 93/13179, the first layer will comprise, for a limited time, unreacted curable silicon-containing functional groups. However, as these unreacted functional groups in component (A) are capable of undergoing a condensation curing reaction with component (B) which is present in the first coating layer in a sufficient amount, these temporarily unreacted silicon-containing groups will not provide latent reactivity.

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In view of the amendments and remarks herein and the papers submitted previously, Applicants respectfully request reconsideration and withdrawal of the subject rejections. The present application is believed to be in condition for allowance, which action is respectfully requested.

Respectfully submitted,


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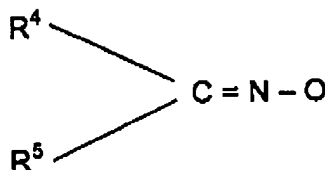
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4. (Twice amended) A process according to claim 1, wherein the curable silicon-containing functional groups are groups of the formula



in which the groups represented by R_1 , R_2 , and R_3 may be the same or different and each may comprise an ether or ester group, ~~preferably a group including a straight chain or branched alkyl moiety having from 1 to 4 carbon atoms, and in which one or two of R_1 to R_3 may represent hydrogen or a hydrocarbon group, preferably a straight chain or branched alkyl group having from 1 to 4 carbon atoms.~~

5. (Twice amended) A process according to claim 1, wherein the silicon-containing functional groups are curable by virtue of one or more oxime groups of the formula



in which R^4 and R^5 may be the same or different and each represents a straight-chain or branched, saturated or unsaturated, aliphatic hydrocarbon radical, ~~preferably having up to 7 carbon atoms, more especially up to 4 carbon atoms, especially a methyl or ethyl group; an aromatic group, for example, a phenyl group; or an araliphatic group, for example, a benzyl group; or R^4 and R^5 together represent an alkylene group; or one of R^4 and R^5 represents hydrogen.~~

10. (Twice amended) A process according to claim 9, wherein the proportion of siloxane repeating units in the film-forming polymer (A) is not more than 25%, ~~preferably not more than 10%, and more especially not more than 5%.~~

30. (Twice amended) A substrate in a fouling environment and bearing a coating and a cured fouling-inhibiting layer thereon, ~~more especially a cured polysiloxane layer, formed by a process according to claim 1.~~

Please add the following new claims:

35. (New) A process according to claim 4, wherein the ether or ester group includes a straight-chain or branched alkyl moiety having from 1 to 4 carbon atoms, and in which the hydrocarbon group is a straight-chain or branched alkyl group having from 1 to 4 carbon atoms.

36. (New) The process according to claim 5, wherein the straight-chain or branched, saturated or unsaturated, aliphatic hydrocarbon radical has up to 7 carbon atoms; the aromatic group is a phenyl group; and the araliphatic group is a benzyl group.

37. (New) The process according to claim 5, wherein the straight-chain or branched, saturated or unsaturated, aliphatic hydrocarbon radical has up to 4 carbon atoms; the aromatic group is a phenyl group; and the araliphatic group is a benzyl group.

38. (New) The process according to claim 5, wherein the straight-chain or branched, saturated or unsaturated, aliphatic hydrocarbon radical is a methyl or ethyl group; the aromatic group is a phenyl group; and the araliphatic group is a benzyl group.

39. (New) A process according to claim 10, wherein the proportion of siloxane repeating units in the film-forming polymer (A) is not more than 10%.

40. (New) A process according to claim 10, where the proportion of siloxane repeating units in the film-forming polymer (A) is not more than 5%.